PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Fabien POULARD

Appln. No.: 10/577,850

Confirmation No.: 4893

Filed: May 24, 2007

For: FLUID PRODUCT SPRAYING DEVICE

Docket No: Q94564

Group Art Unit: 3771

Examiner: Christopher James BLIZZARD

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

Table of Contents

I. REAL PARTY IN INTEREST

The real party in interest is VALOIS S.A.S., the assignee of the present application by virtue of an assignment executed by the applicant, Fabien POULARD, on April 18, 2006. A Notice of Recordation mailed by the Assignment Branch of the U.S. Patent and Trademark on June 5, 2007, indicates that the assignment was recorded on *May 24, 2007*, at Reel 019383, Frame 0073. A corrected Notice of Recordation mailed by the Assignment Branch of the U.S. Patent and Trademark on November 19, 2007, indicates that the assignment was recorded by the Assignment Branch of the U.S. Patent and Trademark Office on *May 11, 2007*, at Reel 020126, Frame 0531.

II. RELATED APPEALS AND INTERFERENCES

Upon information and belief, there are no other prior or pending appeals, interferences or judicial proceedings known to Appellant's Representative or the Assignee that may be related to, be directly affected by, or have a bearing on the Board's decision in the Appeal.

III. STATUS OF CLAIMS

Claims 1, 2, 4, 5 and 7-11 are all of the claims pending in the application. Claims 3 and 6 have been canceled.

Claims 1, 2, 4, 5 and 7-11 stand rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

Appellant submitted an Amendment under 37 C.F.R. § 1.116 on February 26, 2010, amending claims 1, 4 and 7. In the Advisory Action dated March 17, 2010, the Examiner indicated the Amendment filed on February 26, 2010, will be entered for the purposes of this Appeal.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The claimed invention generally relates to a fluid product spraying device comprising a manually actuated pump.

A. Background

It can be important in fluid product spraying devices to dispense fluid product in a measured manner to prevent overdosage. When fluid product is dispensed using a propellant gas, the product is dispensed at high pressure and the user is clearly aware that the product is dispensed. If a pump is used, however, particularly in new generation pumps, the spray may be so fine that the user does not realize that a dose has been dispensed. Accordingly, if no indication is given that a dose has been dispensed, there is a risk that a user will press the device again, thinking that the first action was ineffective. (*See* specification at page 1, lines 4-28.)

B. Independent Claim 1

According to claim 1, there is a fluid product spraying device comprising:

a fluid product dispensing pump (10) (specification at page 3, lines 20-26) operating without propellant gas and without active spraying means (specification at page 5, lines 11-21) and a spray head (20) to actuate said pump (10) manually (specification at page 3, lines 26-30), wherein said device comprises dispensing detection means (30) to detect that a product dose has been dispensed (specification at page 4, line 3 to page 5, line 3), said detection means (30) being adapted to output a signal to inform the user that a dose of product has actually been dispensed by said pump (page 4, lines 13-21); and

wherein said detection means comprises an expulsion detector adapted to detect the passage of the product in an expulsion channel of the spraying device (page 4, line 22-28).

Appellant notes that the dispensing detection means (30) invoke 35 U.S.C. § 112, sixth paragraph. The corresponding structure is described in the specification at page 4, line 25 to page 5, line 3, and is shown in the only figure as element 30.

C. Independent Claim 9

According to claim 9, there is a fluid product spraying device comprising:

a fluid product dispensing pump (specification at page 3, lines 20-26);

a spray head to manually actuate the pump (specification at page 3, lines 26-30); and

a sensor that senses movement of fluid through the pump, thereby detecting that a product dose has been dispensed (specification at page 4, line 3 to page 5, line 3); and

electronics that output a signal based on information from the sensor to inform the user that a dose of product has been dispensed by the pump (specification at page 4, lines 13-21).

Although the above summary refers to portions of the specification and drawings, these references are not intended to be limiting. Rather, the summary represents non-limiting examples of the exemplary embodiments.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 2, 4, 5, 7 and 8 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, 4, 5 and 7-11 stand rejected under 35 U.S.C. § 103(a) over Tomaka (US 6,651,844) in view of Rocci (US 6,138,669).

VII. ARGUMENT

1. *The rejections under 35 U.S.C. § 112 should be withdrawn in view of the Amendments filed on February 26, 2010*

In the final office action dated October 26, 2009, claims 1, 2, 4, 5, 7 and 8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly clam the subject matter which applicant regards as the invention. Specifically, the Examiner made the following rejections:

- Claim 1 was rejected because the Examiner stated that there was insufficient antecedent basis for "said expulsion channel;"
- Claim 4 was rejected because the Examiner stated that there was insufficient antecedent basis for "according to claim 3;" and
- Claim 7 was rejected because the Examiner stated that the applicant fails to disclose adaptation of pump necessary so that it "dispenses the product in a fine spray that is undetectable by the user."

In the amendment filed under 37 C.F.R. § 1.116 on February 26, 2010, claims 1, 4, and 7 were amended to address the above rejections. In the Advisory Action mailed on March 17, 2010, the Examiner indicated that the amendments would be entered, but did not specifically indicate whether the rejections under 35 U.S.C. § 112 were withdrawn. Applicant submits that entry of these amendments overcomes the rejections under 35 U.S.C. § 112 and respectfully requests that the Examiner confirm that these rejections are withdrawn.

2. The Examiner erred in rejecting claims 1, 2, 4, 5, and 7-11 under 35 U.S.C. § 103 as being unpatentable over Tomaka (US 6,651,844) in view of Rocci (US 6,138,669).

In rejecting claims 1, 2, 4,[2] 5 and 7-11 over Tomaka (US 6,651,844) in view of Rocci (US 6,138,669), the grounds of rejection state:

> [I]t would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the nasal spray device of Tomaka with a detection means provided in an expulsion chamber as taught by Rocci in order to provide the advantage of fewer miscounts, as taught by Rocci (column 2, lines 44-47).

(Final Office Action dated October 26, 2009, at page 3.)

Responding in part to Applicant's previous arguments, the Examiner states:

> Applicant's arguments filed 8/3/09 have been fully considered but they are not persuasive. Applicant's arguments concerning the sensor of Rocci not being operable in the device of Tomaka on the grounds that no pressure burst exist, is not persuasive since in order for a fluid to travel through a passage, such as the passage of Tomaka, a pressure difference must exist therefore the sensor of Rocci would be able to sense the dispensing of medicament in the device of Tomaka.

(Final Office Action dated October 26, 2009, at page 4.)

In order to find a claim obvious, the Examiner must determine that all the limitations would be met in the alleged modified device. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). In addition to this all limitations requirement, the Examiner must articulate convincing rationale for why one skilled in the art would have carried out the

[2] The final Office Action dated October 26, 2009, indicates that only claims 1, 2, 5, and 7-11 (but not claim 4) are rejected under 35 U.S.C. § 103 over Tomaka in view of Rocci. It is believed that the omission of claim 4 was a typographical error since the Examiner incorporated the language rejecting claim 4 from the non-final Office Action dated April 1, 2009, into the final Office Action.

asserted modification. Indeed, the Supreme Court in *KSR v. Teleflex* left undisturbed the requirement that the Examiner must present "*a convincing line of reasoning supporting a rejection*." MPEP § 2144 (emphasis added). Furthermore, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (quoted with approval by *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007)).

For at least the reasons discussed below, in rejecting claims 1, 2, 4, 5 and 7-11 over Tomaka (US 6,651,844) in view of Rocci (US 6,138,669), the Examiner committed error by failing to establish a *prima facie* case of obviousness.

Brief Description of Tomaka (US 6,651,844)

Tomaka discloses a nasal spray device 10 that uses a manually actuated atomizing pump. (*See* Tomaka, col. 3, lines 8-24.) The nasal spray device is actuated by placing a thumb at the bottom 38 of the counter body 32, placing an index finger and middle finger on the shoulder 20, and moving the index and middle fingers toward the thumb. (*See* Tomaka, col. 5, lines 31-45; *see also* FIGS. 2, 3.) When the nasal spray device is actuated, the compressive force between the thumb and fingers causes a thumb button 40 to be depressed, which causes an audible sound and a decrement of the counter by 1. (*See* Tomaka, col. 5, lines 40-43; FIGS. 9, 10.)

Brief Description of Rocci (US 6,138,669)

Rocci, on the other hand, discloses a typical Metered Dose Inhaler (MDI) that consists of (1) a canister; (2) a valve; (3) a mouthpiece; and (4) the contents of the canister which include an aerosol propellant. (*See* Rocci, col. 1, lines 19-31.) When the MDI is actuated, a dose is released

from the pressurized canister and the propellant quickly volatilizes and expands, thereby causing a pressure burst that propels the dose out of the transfer channel. (Rocci, col. 5, lines 10-18.) The pressure rise and fall is sensed by a pressure sensor, which sends a signal to a microprocessor to count the number of doses. (Rocci, col. 5, lines 15-17, col. 6, lines 46-55.)

Arguments

First, regarding the all limitations requirement, the Examiner's position is essentially that Tomaka generates sufficient pressure differential that can be detected by the sensor of Rocci. However, nowhere is this technical conclusion supported. Rather, the grounds of rejection assume that *any* amount of pressure differential would suffice. However, as explained in Applicant's previous response, the sensor of Rocci is ***specifically designed for a MDI device***– that is devices that use an aerosol propellant with a metered dose valve to deliver the dose. Such devices produce a pressure burst that is detected by the sensor. On the other hand, the device disclosed in Tomaka does not use a propellant. Thus, even if one were to modify the device of Tomaka to include the sensor of Rocci, it would not appear that the sensor would operate as claimed.

Moreover, given that the sensor of Rocci is ***specifically designed for a MDI device,*** it would not have been obvious in the first place to modify the device of Tomaka to include ***only*** the sensor from Rocci and without further modifying the device of Rocci to include the propellant and valve. There is no rationale for lifting only the sensor from Rocci and adapting it to the device of Tomaka.

The grounds of rejection state that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the nasal spray device of Tomaka with a

detection means provided in an expulsion chamber as taught by Rocci in order to provide the advantage of fewer miscounts, as taught by Rocci (column 2, lines 44-47)." However, what this stated rationale does not take into account is that the device of Tomaka ***already includes a mechanism for ensuring no miscounts***.

In fact, the disclosure and subject matter of the claims of Tomaka are specifically directed to a mechanism for ***accurately counting*** sprays. (*See e.g.,* Tomaka, col. 1, lines 4-8 and 51-64.) Nowhere in the prior art is there an indication that the mechanism in Tomaka is deficient or inadequate in any way. In addition, one skilled in the art would not have found it obvious to replace the mechanism of Tomaka with the one of Rocci, since the latter is more complex and expensive. Rather, it is ***Applicant's disclosure*** that teaches the benefit of ***detecting*** the passage of product in the expulsion channel to confirm a dose has been emitted.

Furthermore, the grounds of rejection do not explain why one skilled in the art, looking for a system informing the user that the dose of product has actually been dispensed from a pump operating without propellant gas, would even look into Rocci to find a solution, which is exclusively limited to MDI systems, that is systems containing propellant in a pressurized canister and using a metered dose valve. (*See, e.g.,* Rocci at col. 1, lines 15-31.)

Rocci makes clear that the sensor is used in MDI applications – systems having propellant gas in a pressurized container operating with a metered dose valve.

In Tomaka, there is a sound generator and a count decrement indicating to the user that the actuating button has been properly depressed. (*See, e.g.,* Tomaka, at col. 5, lines 10-12.) The sound generator and count decrement are employed in a pump operating without propellant.

Thus, one basic difference between the claimed invention and Tomaka is the dispensing detection system. Whereas in Tomaka it is the correct actuation of the actuating button that is indicated, in the claimed invention, it is the effective dispensing of the product passing through the expulsion channel that is detected.

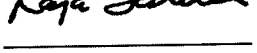
As explained above, it would not have been obvious to a person skilled in the art to consider Rocci to replace Tomaka's sound generator by a dispensing detection system, especially given that the technical field of MDI's, operating with pressurized propellant gas, is fundamentally different from the technical field of pumps operating without such propellant. Indeed, the dispensing properties created during dispensing by an MDI are different from those created by a pump operating without propellant. Furthermore, there is no indication that the counting and sound generating device of Tomaka is in anyway inadequate. A person skilled in the art thus would have no reason to believe that he may find in the MDI field a solution operating in the pump field. The grounds of rejection, on the other hand, fail to account for these technological differences.

In view of at least the foregoing, it is requested that the rejections under 35 U.S.C. § 103 be reversed.

3. Conclusion

The USPTO is directed and authorized to charge the statutory fee (37 C.F.R. §41.37(a) and 1.17(c)) and all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Raja N. Saliba
Registration No. 43,078

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: June 28, 2010

CLAIMS APPENDIX

CLAIMS 1, 2, 4, 5 and 7-11 ON APPEAL:

1. Fluid product spraying device comprising a fluid product dispensing pump (10) operating without propellant gas and without active spraying means and a spray head (20) to actuate said pump (10) manually, wherein said device comprises dispensing detection means (30) to detect that a product dose has been dispensed, said detection means (30) being adapted to output a signal to inform the user that a dose of product has actually been dispensed by said pump; and

wherein said detection means comprises an expulsion detector adapted to detect the passage of the product in an expulsion channel of the spraying device.

2. Device according to claim 1, in which the dispensing pump (10) is connected to a spraying orifice (40) through an expulsion channel (50), said detection means (30) being provided in said expulsion channel (50).

3. (canceled).

4. Device according to claim 1, in which said expulsion detector (30) comprises a pressure sensor adapted to detect the pressure difference at the time that a product dose is sprayed.

5. Device according to claim 1, in which said detection means (30) are connected to electronic means to process signals output by said detection means (30).

6. (canceled).

7. Device according to claim 1, in which said device is a nasal spraying device, and said pump configured with a spraying orifice that dispenses the product in a fine spray that is undetectable by the user, said detection means (30) informing the user each time that a product dose has been dispensed.

8. Device according to claim 1, wherein the dispensing pump operates without piezoelectric or electrostatic spraying mechanisms.

9. A fluid product spraying device comprising:

a fluid product dispensing pump;

a spray head to manually actuate the pump; and

a sensor that senses movement of fluid through the pump, thereby detecting that a product dose has been dispensed; and

electronics that output a signal based on information from the sensor to inform the user that a dose of product has been dispensed by the pump.

10. The device according to claim 9, wherein the sensor senses movement of fluid through an expulsion channel of the pump.

11. The device according to claim 9, wherein the pump operates without propellant gas and without active spraying means, including as piezoelectric or electrostatic spraying mechanism.

EVIDENCE APPENDIX:

No evidence has been submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132.

RELATED PROCEEDINGS APPENDIX

As previously noted, it is believed that there are no related proceedings.

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Sir:

Submitted herewith please find an Appeal Brief. The USPTO is directed and authorized to charge the statutory fee of $540.00 and all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Raja N. Saliba
Registration No. 43,078

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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